# REPORT ON THE JANUARY 1, 2003 ACTUARIAL VALUATION OF THE DUKES COUNTY CONTRIBUTORY RETIREMENT SYSTEM

September, 2003

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**SECTION I - OVERVIEW** 

The Dukes County Retirement Board has engaged Buck Consultants to prepare an actuarial valuation

of the Retirement System as of January 1, 2003. Employee data and asset information used in the

valuation were provided by the Retirement Board.

The valuation was prepared pursuant to Chapter 32 of the Massachusetts General Laws, based upon

the acceptance of Section 22D.

The purposes of the valuation are to:

1) analyze the current funded position of the System and determine the level of

contributions necessary to assure sound funding;

2) update the Section 22D funding schedule currently in place for the Retirement System;

and

3) provide reporting and disclosure information for financial statements, governmental

agencies and other interested parties.

The prior valuation report was prepared as of January 1, 2001. The actuarial assumptions used in this

valuation, which are detailed in Schedule B, differ in some respects from those used in the prior

valuation. In general, the demographic assumptions were changed to those recommended by PERAC

in its report on the "Local Experience Study Analysis" it conducted in 2002, and the funding interest rate

was lowered from 8.00% to 7.75%.

Dukes County Contributory Retirement System

### **SECTION I – OVERVIEW (CONTINUED)**

The actuarial cost method used in the valuation was changed in that a five-year "smoothing" method replaced unadjusted market value as the method of valuing System assets. The new method is set forth in detail in Schedule B

Furthermore, this report reflects the County's adoption of the 2002 Early Retirement Incentive ("ERI") program, under which 26 County employees retired. Elections of early retirement under this program raised the System's unfunded liability as of January 1, 2003 by \$1,497,715.

Section II provides a summary of the principal valuation results. Section V provides a projection of the Section 22D funding amounts.

Respectfully Submitted,

**BUCK CONSULTANTS** 

David L. Driscoll, FSA, MCA, MAAA, EA Date Associate Principal and Consulting Actuary

Date

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Senior Consultant, Actuary

#### **SECTION II - SUMMARY OF PRINCIPAL RESULTS**

1. For convenience of reference, the principal results of the valuation as of January 1, 2003 are summarized below along with a comparison with the amounts in the previous valuation as of January 1, 2001.

	Valuation Date		January 1, 2003		January 1, 2001			
a)	Active members:							
	Number		612		612			
	Annual compensation	\$	20,191,180	\$	18,408,970			
	Average age		44.7		44.7			
	Average service		7.3		7.4			
	Average compensation	\$	32,992	\$	30,080			
b)	Pensioners and beneficiaries paid by the County	<sup>1</sup> :						
	Number		196		149			
	Annual benefit payments	\$	2,775,516	\$	1,625,675			
	Average benefit	\$	14,161	\$	10,911			
c)	Pensioners and beneficiaries paid by other munic	cipalitie	es <sup>2</sup> :					
	Number	-	18		n/a			
	Annual benefit payments	\$	67,913		n/a			
	Average benefit	\$	3,773		n/a			
d)	Inactive employees:							
	Number		120		134			
	Accumulated employee contributions	\$	713,248	\$	712,602			
e)	Actuarial accrued liability	\$	63,042,045	\$	45,304,948			
f)	Market value of assets	\$	30,815,688	\$	31,491,429			
g)	Assets for valuation purposes	\$	36,978,826	\$	31,491,429			
h)	Unfunded actuarial accrued liability (e. $-g$ .)	\$	26,063,219	\$	13,813,519			
i)	Funded percentage (g. / e.)		58.7%		69.5%			
j)	Section 22D funding for fiscal 2004 <sup>3</sup>	\$	2,766,595	\$	2,654,595			
k)	Section 22D funding for fiscal 2005	\$	3,372,865	\$	2,781,242			

.

Amounts exclude portion of benefits being reimbursed by other retirement systems and also excludes costof-living adjustments paid by the State.

These individuals represent former Dukes County employees who transferred to other municipalities and for whom Dukes County reimburses other municipalities for "Dukes County's share" of their pensions.

The 2004 fiscal-year appropriation represents the actual amount already appropriated by the County for the fiscal year.

A projection of Section 22D costs is presented in Section V. Schedule B of this report outlines the

actuarial assumptions and methods employed. The provisions of the System are summarized in

Schedule C. The valuation includes additional liabilities resulting from Chapter 17 COLA legislation.

**SECTION III - MEMBERSHIP DATA** 

In order to calculate the aggregate liabilities and assets on account of members of the System as of

January 1, 2003, data were needed with respect to each active and retired member and beneficiary of

the System. The data with respect to active, retired and terminated members and beneficiaries were

furnished to the actuary on diskette by the Retirement Board.

From the data, tabulations were made showing, as of January 1, 2003, the number and annual

compensation of active members classified by age and years of service and the number and annual

retirement allowances of retired members and beneficiaries as of January 1, 2003 classified by age.

These tables are presented in Schedule D.

The following tables show the number of active and retired members of the Retirement System as of January 1, 2003.

TABLE I

THE NUMBER AND ANNUAL COMPENSATION
OF ACTIVE MEMBERS
AS OF JANUARY 1, 2003

GROUP	NUMBER	COMPENSATION
General Employees	512	\$ 15,730,223
Police and Fire	<u>100</u>	<u>\$ 4,460,957</u>
Total	612	\$ 20,191,180

TABLE II

# THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES PAID DIRECTLY BY THE COUNTY AS OF JANUARY 1, 2003

	ANNUAL RETIREMENT ALLOWANCE					
GROUP	NUMBER	PENSION*	ANNUITY	TOTAL		
				_		
Service Retirements	163	\$ 1,746,023	\$ 383,001	\$ 2,129,024		
Disability Retirements	16	\$ 441,416	\$ 67,635	\$ 509,051		
Beneficiaries of Deceased Members	<u>17</u>	\$ 124,812	\$ 12,629	\$ 137,441		
Grand Total	196	\$ 2,312,251	\$ 463,265	\$ 2,775,516		

<sup>\*</sup> Pension amounts exclude cost-of-living adjustments applied after July 1, 1981, and prior to July 1, 1998, which are funded by the Commonwealth of Massachusetts.

In addition, there are 120 members with estimated deferred benefits valued at \$713,248.

#### **SECTION IV - ASSETS**

The amount of assets taken into account in this valuation is based on financial information reported by the Retirement Board. As of January 1, 2003, the reported market value of Retirement System assets amounted to \$30,815,688. The actuarial value of assets for valuation funding purposes is \$36,978,826. Valuation assets are developed using a smoothing method (described in Schedule B) in order to smooth the year-to-year fluctuations due to deviations of investment returns from expected levels.

(1)	Market value of plan assets, 1/1/2002	31,032,842
(2)	Employer and employee contributions, net transfers and reimbursements	4,512,277
(3)	Expenses	(340,215)
(4)	Benefits and refunds	(2,540,980)
(5)	Expected interest during the year	2,553,308
(6)	Expected market value of plan assets, 1/1/2003	35,217,232
(7)	Actual market value of plan assets, 1/1/2003	30,815,688
(8)	Investment gain/(loss) for the 2002 plan year = $(7)$ - $(6)$	(4,401,544)
(9)	Investment gain/(loss) for the 2001 plan year	(4,466,028)
(10)	Investment gain/(loss) for the 2000 plan year	(2,950,253)
(11)	Investment gain/(loss) for the 1999 plan year	989,911
(12)	Tentative Valuation Assets before reflecting 80%-120% corridor = $[(7) - 80\% \times (8) - 60\% \times (9) - 40\% \times (10) - 20\% \times (11)]$	37,998,659
(13)	80% of actual market value = $80\% \times (7)$	24,652,550
(14)	120% of actual market value = 120% $x$ (7)	36,978,826
(15)	Valuation Assets = (12) but not less than (13) or greater than (14)	36,978,826

Section 22D of MGL Chapter 32 outlines various requirements of a funding schedule that will amortize

the unfunded actuarial liability and cover normal costs. The normal cost and unfunded actuarial liability

are to be calculated in accordance with the individual entry-age-normal actuarial cost method.

Amortization of the unfunded actuarial liability is to be based on a schedule that ends no later than the

year 2028. The contribution toward amortization of the unfunded actuarial liability may increase by up to

 $4\frac{1}{2}$ % each year.

The following table presents a projection of contributions that satisfy the Section 22D requirements. The

contributions were computed assuming that one-half of the contribution is paid on July 1, and the

remainder is paid on January 1. The normal cost is assumed to increase by 5% annually while the

unfunded accrued liability contribution is based on a 4½% annual increase. This schedule incorporates

the funding required to provide annual COLAs under Chapter 17 of the Acts of 1997.

Please note that the amounts shown in the following schedule for the 2004 fiscal year

represent the actual amounts already appropriated by the County for the 2004 fiscal year.

Also, the "ERI" column in the following funding schedule represents the amortization of the

liability from the ERI of 1992.

# PENSION REFORM ACT - SECTION 22D FUNDING REQUIREMENTS

		Amortization of t	he Unfunded	Total
Fiscal Year		<b>Actuarial Accru</b>	ed Liability	County
Ending in	Normal Cost	Excluding ERI ERI		Contribution
2004	1,537,394	1,218,154	11,047	2,766,595
2005	1,424,886	1,936,974	11,005	3,372,865
2006	1,496,131	2,024,138	11,005	3,531,274
2007	1,570,938	2,115,225	11,005	3,697,168
2008	1,649,485	2,210,410	11,005	3,870,900
2009	1,731,959	2,309,878	0	4,041,837
2010	1,818,557	2,413,823	0	4,232,380
2011	1,909,485	2,522,445	0	4,431,930
2012	2,004,959	2,635,955	0	4,640,914
2013	2,105,207	2,754,573	0	4,859,780
2014	2,210,467	2,878,528	0	5,088,995
2015	2,320,990	3,008,062	0	5,329,052
2016	2,437,040	3,143,425	0	5,580,465
2017	2,558,892	3,284,879	0	5,843,771
2018	2,686,837	3,432,699	0	6,119,536
2019	2,821,179	3,587,170	0	6,408,349
2020	2,962,238	3,748,593	0	6,710,831
2021	3,110,350	3,917,279	0	7,027,629
2022	3,265,868	4,093,557	0	7,359,425
2023	3,429,161	4,277,767	0	7,706,928
2024	3,600,619	0	0	3,600,619
2025	3,780,650	0	0	3,780,650
2026	3,969,683	0	0	3,969,683
2027	4,168,167	0	0	4,168,167
2028	4,376,575	0	0	4,376,575
2029	4,595,404	0	0	4,595,404
2030	4,825,174	0	0	4,825,174
2031	5,066,433	0	0	5,066,433
2032	5,319,755	0	0	5,319,755
2033	5,585,743	0	0	5,585,743

#### **SECTION VI – ACCOUNTING INFORMATION**

Information required under Statement No. 25 of the Governmental Accounting Standard Board (GASB) is shown below:

	Normal Cost as of January 1, 2003	Percentage of Payroll	
Normal cost for the employees	\$ 1,685,126	8.35%	
Normal cost for the employers	\$ 1,283,375	6.36%	

# Actuarial Accrued Liability as of January 1, 2003

# Total actuarial liability

Present active members	\$ 32,001,217
Present retired members and beneficiaries	 31,040,828
Total	\$ 63,042,045
Actuarial value of assets	(36,978,826)
Unfunded actuarial accrued liability	\$ 26,063,219

# **Schedule of Funding Progress**

	Actuarial	Actuarial	Unfunded			UAAL as a
Actuarial	Value of	Accrued	AAL	Funded	Covered	% of covered
Valuation	Assets	Liability (AAL)	(UAAL)	Ratio	Payroll	Payroll
Date	(a)	(b)	(b-a)	(a/b)	(c)	((b-a)/c)
1/1/03	\$36,978,826	\$63,042,045	\$26,063,219	58.7%	20,191,180	129%
1/1/01	31,491,429	45,304,948	13,813,519	69.5%	18,408,970	75%
1/1/98	21,621,530	36,447,821	14,826,291	59.3%	14,311,001	104%

#### SCHEDULE A - RESULTS OF THE VALUATION

The results below were developed as of July 1, rather than January 1, since the County's fiscal year begins on July 1. These amounts were determined by adjusting the appropriate amounts as of January 1 to reflect the passage of six months of time.

# Normal Cost as of July 1, 2003

Sum of individual normal costs	\$ 3,081,384
Anticipated employee contributions	(1,749,206)
Total County normal cost	\$ 1,332,178

# Actuarial Accrued Liability as of July 1, 2003

#### Total actuarial liability

Present active members	\$ 33,218,126
Present inactive members	740,371
Present retired members and beneficiaries	31,480,846
Total	\$ 65,439,343
Actuarial value of assets	(38,385,018)
Unfunded actuarial accrued liability	\$ 27,054,325

#### SCHEDULE B - ACTUARIAL ASSUMPTIONS AND METHODS

#### GENERAL EMPLOYEES

VALUATION INTEREST RATE: 7.75% per annum, compounded annually, net of expenses.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of withdrawal and vesting, disability, death and service retirement are as follows:

#### Annual Rates of

		Death		Service Retirement				Years of	Salary	Years of	Rates of
Age	Disability	Male	Female	Male	Female	Service	Scale	Service	Withdrawal		
25	.02%	.04%	.02%			0	7.00%	0	15.0%		
30	.03	.04	.03			1	6.50	1	12.0%		
35	.06	.08	.05			2	6.50	2	10.0%		
40	.10	.11	.07			3	6.00	3	9.0%		
45	.15	.15	.11			4	6.00	4	8.0%		
50	.19	.21	.17	1.0%	1.5%	5	5.50	5	7.6%		
55	.24	.30	.25	2.0	5.5	6	5.50	10	5.4%		
60	.28	.49	.39	12.0	5.0	7	5.00	15	3.3%		
62	.30	.59	.47	30.0	15.0	8	5.00	20	2.0%		
65	.30	.76	.58	40.0	15.0	9+	4.75	25	1.0%		
69		.95	.73	30.0	20.0			30+	0.0%		

COST-OF-LIVING ADJUSTMENTS: Retirement benefits were assumed to increase annually by 3%, up to a maximum of \$360.

DEATHS AFTER RETIREMENT: The RP-2000 Healthy Annuitant Table. For the period after disability retirement, the RP-2000 Healthy Annuitant Table set forward 2 years is used.

LOADING OR CONTINGENCY RESERVE: None.

ASSET VALUATION METHOD: For contribution basis, assets are valued according to the following general formula, provided such value is within a 20% corridor of the market value:

$$VA = MV - .8I_1 - .6I_2 - .4I_3 - .2I_4$$
 where

VA = Valuation assets.

MV = Market value of assets as of the valuation date.

 $I_n = Investment gain (loss) during n<sup>th</sup> year preceding the valuation date.$ 

#### POLICE AND FIRE

VALUATION INTEREST RATE: 7.75% per annum, compounded annually, net of expenses.

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of disability, death and service retirement are as follows:

#### Annual Rates of

		De	eath	Service
Age	Disability	Male	Female	Retirements
25	0.20%	.04%	.02%	
30	0.30	.04	.03	
35	0.30	.08	.05	
40	0.30	.11	.07	
45	1.00	.15	.11	1.0%
50	1.25	.21	.17	2.0
55	1.20	.30	.25	15.0
60	0.85	.49	.39	20.0
62	0.75	.59	.47	25.0
65	0.00	.76	.58	100.0
69		.95	.73	

Years of Service	Salary Scale
0	8.00%
1	7.50
2	7.00
3	6.50
4	6.00
5	6.00
6	5.50
7	5.50
8+	5.25

Years of Service	Rates of Withdrawal
0	1.5%
1	1.5
2	1.5
3	1.5
4	1.5
5	1.5
6	1.5
7	1.5
8	1.5
9	1.5
10	1.5
11+	0.0

COST-OF-LIVING ADJUSTMENTS: Retirement benefits were assumed to increase annually by 3%, up to a maximum of \$360.

DEATHS AFTER RETIREMENT: The RP-2000 Healthy Annuitant Table. For the period after disability retirement, the RP-2000 Healthy Annuitant Table set forward 2 years is used.

LOADING OR CONTINGENCY RESERVE: None.

ASSET VALUATION METHOD: For contribution basis, assets are valued according to the following general formula, provided such value is within a 20% corridor of the market value:

$$VA = MV - .8I_1 - .6I_2 - .4I_3 - .2I_4$$
 where

VA = Valuation assets.

MV = Market value of assets as of the valuation date.

 $I_n = I_n$  Investment gain (loss) during  $n^{th}$  year preceding the valuation date.

#### SCHEDULE C - SUMMARY OF SYSTEM PROVISIONS

#### **MEMBERSHIP**

The Retirement System covers all employees of participating units except teachers, elected officials and those employees in service at the time of its establishment who elected not to become members. Eligible employees in the County who enter service on or after the date the System became operative for their classification may become members of the Retirement System on their own application.

#### SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

A summary of the main benefit and contribution provisions of the Retirement System, as interpreted for the valuation, is presented below.

The terms "Group 1" and "Group 4" are used to denote "general employees" and "police and fire", respectively.

#### **BENEFITS**

Final Average Salary (FAS)

The average of a member's 3 highest consecutive years'

compensation.

Superannuation Retirement

Eligibility Age 65 for Group 1; Age 55 for Group 4. Maximum retirement

age is 70 for Group 1 and 65 for Group 4.

Allowance 2.5% per year of service times FAS. Veterans receive

additional \$15 annually per year of service to a maximum of

\$300 annually. Maximum total allowance is 80% of FAS.

#### Early Retirement

Eligibility

20 years of service.

Allowance

Calculated as a superannuation retirement allowance (including veteran's benefits) except accrual rate is equal to 2.5% reduced by .1% for each year age at retirement is below either 65 for Group 1 or 55 for Group 4.

The minimum allowance after 30 years of service is equal to:

- (1) An annuity which is the actuarial equivalent of member's accumulated deductions; and
- (2) A pension equal to 1/3 of FAS and any veteran's benefits as described under superannuation retirement.

#### Vested Retirement

Eligibility

10 years of service. For certain involuntary terminations, this is reduced to 6 years.

Allowance

A superannuation retirement allowance commencing at age 55 for Group 1 members and age 45 for Group 4 members or later, where the accrual rate is determined by the age of the member at the time the allowance commences.

#### Ordinary Disability

Eligibility

10 years of service

Allowance

An immediate allowance equal to the age 55 rate for Group 1 members or age 45 rate for Group 4 members per year of service times FAS.

Veterans receive an allowance equal to:

- (1) An annuity which is the actuarial equivalent of their accumulated deductions; and
- (2) A pension which is the greater of 50% of current salary and the service retirement allowance to which they are eligible, if any.

#### Accidental Disability

Eligibility

None.

Allowance

An immediate allowance equal to:

- (1) An annuity which is the actuarial equivalent of the member's accumulated deductions; and
- (2) A pension equal to 72% of current salary; and
- (3) A supplement equal to \$543.12 per year per child under 21.

The maximum total allowance is 100% of current salary.

#### Accidental Death Benefit

Eligibility

None.

Allowance

An immediate allowance equal to:

- (1) A lump sum payment equal to the accumulated deductions at death; and
- (2) A pension equal to 72% of current salary and payable to the surviving spouse, dependent children, or the dependent parents; and
- (3) A supplement of \$312 per year per child payable to the spouse or legal guardian until all children reach age 21, unless handicapped.

The maximum total allowance is 100% of current salary.

Eligibility

None.

Allowance

An immediate allowance that would have been payable had the member retired and elected the 2/3 joint and survivor option on the day before his death. For death occurring prior to the minimum superannuation retirement age, the age 55 and age 45 accrual rates are used, respectively, for Group 1 and Group 4 members.

For members with at least 2 years of service at death, the surviving spouse receives an additional allowance equal to the sum of \$1,440 per year for the first child and \$1,080 per year for each additional child.

The maximum total allowance is 100% of salary at the date of death.

Normal Form of Benefit

Reduced modified cash refund annuity.

Optional Forms of Benefit

- (1) Life annuity.
- (2) Modified cash refund annuity.
- (3) 66-2/3% joint and survivor allowance.

Return of Contribution

If no other benefit is payable upon termination, the member's accumulated deductions are returned.

Post-Retirement Adjustments

Up to 3% of the annual retirement allowance up to a maximum of \$360 annually.

Member Contributions

Members contribute a percentage of annual regular compensation in accordance with their respective dates of hire, as shown below:

	Rate of
Date of Hire	Contribution
Prior to January 1, 1975	5%
On or after January 1, 1975	7%
On or after January 1, 1984	8%
On or after July 1, 1996	9%

Members hired on or after January 1, 1979 contribute an additional 2% of compensation in excess of \$30,000.

# SCHEDULE D

# MEMBERSHIP TABLES

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2003

	0-4		5-9		10-14		15-19		20-24		25-29		30-34		35-39	9	40 and 0	ver	TOTA	L
	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.	Salary	No.
20-24	353,747	17	0	0	0	0	0	0	0	0	(	0	0	0	C	0	C	C	353,747	17
25-29	1,193,357	47	68,708	2	0	0	0	0	0	0	(	0	0	0	C	0	C	C	1,262,065	49
30-34	1,275,361	45	568,763	13	35,751	1	62,762	1	0	0	(	0	0	0	C	0	C	C	1,942,637	60
35-39	1,134,436	46	430,872	12	692,448	16	339,479	7	38,676	1	(	0	0	0	C	0	C	C	2,635,911	. 82
40-44	1,055,921	39	696,456	18	374,352	8	835,520	16	0	0	(	0	0	0	C	0	C	C	2,962,249	81
45-49	1,558,933	62	824,087	19	546,795	15	467,300	10	389,408	8	250,732	4	0	0	C	0	C	C	4,037,255	118
50-54	804,738	27	701,206	22	1,229,212	27	575,510	13	249,914	7	53,460	1	125,496	2	C	0	C	C	3,739,536	99
55-59	653,037	25	397,558	14	228,368	7	404,998	11	237,552	6	83,472	3	0	0	C	0	C	C	2,004,985	66
60-64	168,407	8	139,215	5	140,829	3	154,140	4	51,934	2	43,970	2	71,195	1	88,763	1	C	C	858,453	26
65-69	58,931	3	95,634	3	29,554	2	45,033	1	0	0	(	0	106,404	2	C	0	C	C	335,556	5 11
70 and over	23,574	1	35,212	2	0	0	0	0	0	0	(	0	0	0	C	0	C	C	58,786	3
TOTAL	8,280,442	320	3,957,711	110	3,277,309	79	2,884,742	63	967,484	24	431,634	10	303,095	5	88,763	1	C	C	20,191,180	612

TABLE 2 THE NUMBER AND ANNUAL PENSIONS OF RETIRED MEMBERS DISTRIBUTED BY AGE AS OF JANUARY 1,  $2003^4$ 

	Service	Retirements	Disabilit	y Retirements	Beneficiaries			
Age	Number	Annual Pension	Number	Annual Pension	Number	Annual Pension		
Under 20	0	0	0	C	4	4,680		
20 - 24	0	0	0	Q	0	O		
25 - 29	0	0	0	Q	0	O		
30 - 34	0	0	0	d	0	O		
35 - 39	0	0	0	d	0	0		
40 - 44	0	0	1	16,003	0	0		
45 - 49	2	31,799	1	59,362	0	0		
50 - 54	4	87,548	1	37,734	1	30,089		
55 - 59	23	494,569	4	233,856	2	14,081		
60 - 64	23	451,666	2	21,222	1	4,498		
65 - 69	29	378,532	4	98,482	1	42,521		
70 - 74	20	257,825	1	23,810	3	9,801		
75 - 79	31	219,839	1	11,128	1	3,459		
80 - 84	18	151,169	1	7,454	1	5,611		
85 - 89	9	45,567	0	Q	1	8,584		
90 - 94	4	10,510	0	C	2	14,117		
95 - 99	0	0	0	C	0	0		
100 and over	0	0	0	C	0	0		
Total	163	2,129,024	16	509,051	17	137,441		

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This number includes only those retirees and beneficiaries being paid directly by the County. The annual allowance shown is the portion of the benefit attributable to Dukes County service only.

#### **SCHEDULE E**

# VALUATION RESULTS BY GROUP

# SCHEDULE E - VALUATION RESULTS BY GROUP as of January 1, 2003

	Up-Island	Country of	Towns	Town of	Town of	Town of	Town of	Town of	
Item	Regional School	County of Dukes	Town of Tisbury	Edgartown		West Tisbury	Town of Chilmark	Gay Head	
Active members:			·	J				·	
General employees	35	36	87	104	90	21	24	8	
Police	0	39	11	20	14	6	7	3	
Total	35	75	98	124	104	27	31	11	
Annual compensation	703,586	2,884,019	3,166,050	4,351,822	3,083,371	1,086,757	1,012,858	351,943	
Accumulated employee contributions	457,765	1,187,981	2,039,487	3,031,135	1,247,244	888,294	530,107	196,789	
Retired members and beneficiaries:									
Number	1	31	46	27	40	8	8	4	
Annual benefit payments	8,658	440,750	542,154	392,495	623,644	96,276	128,497	52,342	
Average benefit	8,658	14,218	11,786	14,537	15,591	12,035	16,062	13,086	
Inactive employees:									
Number	15	7	15	16	35	2	3	2	
Accumulated employee contributions	58,831	48,731	67,114	108,525	197,764	16,346	75,483	14,909	
Section 22D funding for fiscal 2005	115,424	482,196	540,546	723,540	511,730	183,202	173,376	56,757	
Unfunded actuarial liability	881,154	3,728,287	4,236,605	5,573,554	3,937,256	1,424,148	1,361,104	428,190	
			Martha's	Martha's		Martha's			
	<b>Dukes County</b>		Vineyard	Vineyard	Martha's	Vineyard	Martha's		
	Housing	Town of	Transit	Regional	Vineyard	Refuse	Vineyard	Oak Bluffs	
Item	Authority	Gosnold	Authority	School	Land Bank	District	Commission	Water Dept.	Total
Active members:									
General employees	0	5	8	60	7	8	10	9	512
Police	0	0	0	0	0	0	0	0	100
Total	0	5	8	60	./	8	10	9	612
Annual compensation	0	102,951	275,268	1,822,030	328,541	304,882	436,685	280,417	20,191,180
Accumulated employee contributions	0	30,364	80,783	669,922	214,239	264,502	236,627	264,388	11,339,627
Retired members and beneficiaries:									
Number	0	2	0	24	0	1	3	1	196
Annual benefit payments	0	8,977	0	403,547	0	13,509	63,770	897	2,775,516
Average benefit	0	4,489	0	16,814	0	13,509	21,257	897	14,161
Inactive employees:									
Number	0	1	0	19	4	0	0	1	120
	0	1 33,083	0 0	19 63,401	4 28,649	0	0	1 412	120 713,248
Number	0 0	1 33,083 16,603	0 0 44,392			0 0 49,168	0 0 70,423	1 412 45,222	

Dukes County Contributory Retirement System January 1, 2003

#### **SCHEDULE F**

# PROJECTION OF EXPECTED PENSION PAYMENTS

YEAR	AMOUNT	YEAR	AMOUNT
2003	3,252,637	2028	13,712,878
2004	3,482,037	2029	14,052,114
2005	3,652,367	2030	14,344,050
2006	3,825,750	2031	14,584,909
2007	4,024,738	2032	14,795,957
2008	4,255,547	2033	14,921,479
2009	4,511,538	2034	14,995,053
2010	4,777,931	2035	14,965,946
2011	5,106,807	2036	14,895,431
2012	5,482,995	2037	14,744,440
2013	5,936,506	2038	14,502,814
2014	6,398,530	2039	14,178,559
2015	6,871,658	2040	13,814,584
2016	7,414,689	2041	13,414,636
2017	7,944,395	2042	12,983,269
2018	8,531,344	2043	12,480,955
2019	9,084,531	2044	11,933,178
2020	9,614,319	2045	11,352,543
2021	10,189,350	2046	10,783,744
2022	10,778,224	2047	10,182,423
2023	11,351,018	2048	9,548,160
2024	11,897,219	2049	8,912,900
2025	12,400,644	2050	8,297,929
2026	12,902,717	2051	7,682,363
2027	13,320,878	2052	7,075,837